

ABSTRACT OF THE DISCLOSURE

A stator support structure is constructed having a divided-coil type stator 5 having a plurality of divided stator cores 5A and a plurality of stator coils wound around the stator cores, respectively. First and second rotors 7 and 9 are located inside and outside the stator 5, respectively, to form a three-layer structure. The stator cores 5A are fixedly supported at both distal ends thereof with front and rear stator support members, respectively, with equally spaced distances. A plurality of elongated positioning projection members 31 are located between the stator cores 5A. Further, provision of the stator support members 19 and 21 made of a material having nonmagnetic and high heat conducting properties allows the stator support members 19 and 21 to discharge heat from the stator 5.